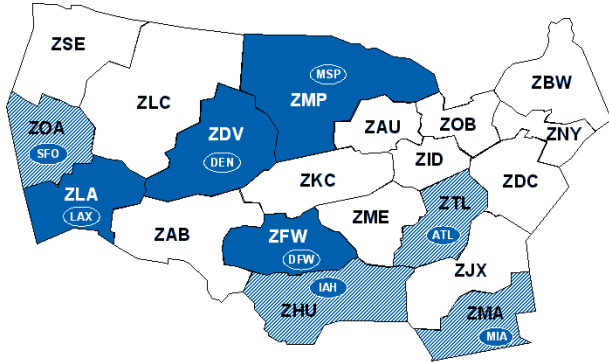


TMA Benefits Review

August 2003

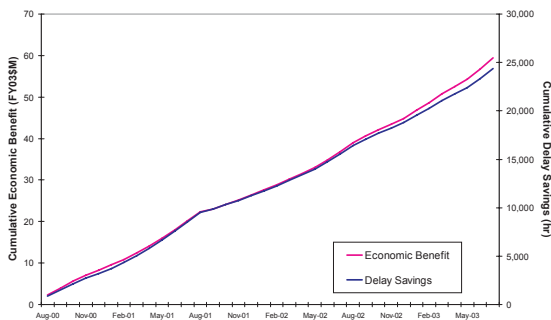
Overview



Time-Based Metering TMU Only

- Traffic Management Advisor(TMA) is in place at 8 centers and will be implemented at 3 additional sites as part of Free Flight Phase 2.
- Sites that are designated *TMU Only* do not use time-based metering but use TMA in the Traffic Management Unit as a strategic planning tool.
- TMA benefits include:
 - ✦ Increased peak-period throughput (3-5%);
 - ✦ Reduced delay for internal departures (flights departing to an airport from within the center);
 - ✦ Redistributed delay from lower to higher, more fuel-efficient altitudes.

Monthly Measures



Benefits for the following centers/airports:
ZMP/Minneapolis-St. Paul International; ZDV/Denver International; ZLA/Los Angeles International and ZTL/Hartsfield Atlanta International.

Does not include ZFW/DFW, where the NASA TMA has saved users more than \$43M since 1996.

Highlights

TMA Operational at Houston Center

TMA went operational at Houston Center (ZHU) on July 14, one month ahead of schedule. TMA is used by Traffic Management Coordinators at the center to schedule the release of internal departures bound for Houston's George Bush Intercontinental Airport (IAH), and to optimize miles-in-trail restrictions. The IAH TRACON uses the TMA displays to help anticipate arrival rushes.

Timeline Graphical User Interface (T-GUI) Display



Miami Achieves High Rate with TMA

Time-based metering (TBM) is not yet implemented at Miami Center, but a TBM test was run in January. The peak arrival rate achieved during the test was higher than both the average and maximum arrival rates, measured in 15-minute bins, previously achieved at Miami International Airport (MIA).

Peak Arrival Rates at MIA

